

CLAIMS

Please amend the presently pending claims as follows:

1-18. Cancelled.

19. (Currently Amended) Method for reception of radio data transmitted between at least two emittersbase stations and one receivermobile terminal wherein the method comprises:

a first step of receiving data transmitted by a multicarrier data transmission signal, the multicarrier data transmission signal being formed from a sequence in time of symbols comprising firstly information data elements, and secondly reference elements called pilots,

said pilots being distributed within the information data elements according to a predetermined pattern, and having a ~~for which the value during at emission is known to~~ by the receivermobile terminal,

at least two of the emittersbase stations using distinct pilot patterns such that at any given moment and at any given frequency, the receivermobile terminal can only receive one pilot from the emittersbase stations;

a second step of identifying the emitterbase station, which emitted the data, using a control information transmission signal, which allows notably the receivermobile terminal, upon data reception, to identify the emitterbase station that emitted them the data; and

a third step of determining the pilot pattern used by the identified emitterbase station.

20. (Currently Amended) Method for reception of data according to claim 19, wherein, when the pilot pattern was generated using a generation function for which one parameter is an identifier of the associated emitterbase station, the step of determining implements the generation function as a function of the identified emitterbase station.

21. (Currently Amended) Method for reception of data according to claim 19 and further comprising a step for extracting the pilots from the multicarrier data transmission signal, and a step for estimating ~~the—a~~ transfer function of a transmission channel associated with the multicarrier data transmission signal.

22. (Currently Amended) Method for reception of data according to claim 19, wherein the multicarrier data transmission signal is of ~~the—an~~ OFDM type.

23. (Currently Amended) Method for reception of data according to claim 19, wherein each of the ~~emittersbase stations~~ uses a specific pilot pattern.

24. (Currently Amended) Method for reception of data according to claim 19, wherein said method is implemented in a cellular radio communication network, ~~and the emittersbase stations~~ are base stations of the network, ~~and the receiver is a mobile terminal.~~

25. (Currently Amended) Cellular radio communication system comprising:

at least two ~~emittersbase stations~~ and one ~~receivermobile terminal~~, implementing a multicarrier data transmission signal, the multicarrier data transmission signal being formed from a time sequence of symbols composed firstly of information data elements and secondly of reference elements called pilots,
~~said pilots being~~ distributed within the information data elements according to a predetermined pattern, and ~~having for which the—a value at on emission—is known by~~ the ~~receivermobile terminal~~;

wherein at least two of the ~~emittersbase stations~~ use distinct pilot patterns, such that only one pilot can be received by the ~~receivermobile terminal~~ from the ~~emittersbase stations~~, at a given time and at a given frequency; and

wherein said ~~receivermobile terminal~~ comprises:

first means of receiving data transmitted by the multicarrier data transmission

signal;

second means of identifying the ~~emitter~~base station that emitted the data, using a control information transmission signal, which allows notably the ~~receiver~~mobile terminal to identify the ~~emitter~~base station that emitted the data when ~~it—the mobile terminal receives them the data~~; and
third means of determining the pilot pattern used by the identified ~~emitter~~base station.

26. (Currently Amended) Mobile terminal in a cellular radio communication system, comprising:

means of receiving radio data transmitted by at least two ~~emitters~~base stations, in the form of a multicarrier data transmission signal, the multicarrier data transmission signal being formed from a time sequence of symbols composed firstly of information data elements and secondly of reference elements called pilots, said pilots being distributed within the information data elements according to a predetermined pattern, and having after which the value on—at emission is known by to the mobile terminal, at least two of the ~~emitters~~base stations using distinct pilot patterns, such that only one pilot can be received by the ~~receiver~~mobile terminal from the ~~emitters~~base stations, at a given time and at a given frequency;

means of receiving data transmitted by the multicarrier data transmission signal;
means of identifying the ~~emitter~~base station that emitted the data, using a control information transmission signal, which allows notably the ~~receiver~~mobile terminal to identify the ~~emitter~~base station that emitted the data when ~~it—the mobile terminal receives them the data~~; and

means of determining the pilot pattern used by the identified ~~emitter~~base station.

27. (Currently Amended) A cellular radio communication mobile comprising a ~~receiver~~mobile terminal adapted to receive radio data transmitted by at least two ~~emitters~~base stations, in the form of a multicarrier data transmission signal, the multicarrier data transmission

signal being formed from a time sequence of symbols composed firstly of information data elements and secondly of reference elements called pilots,

said pilots being distributed within the information data elements according to a predetermined pattern, and having a for which the value at on emission is known to by -the mobile terminal, at least two of the emittersbase stations using distinct pilot patterns, such that only one pilot can be received by the receivermobile terminal from the emittersbase stations, at a given time and at a given frequency, wherein the receivermobile terminal is adapted to identify the emitterbase station that emitted the data, using a control information transmission signal, which allows the receivermobile terminal to identify the emitterbase station that emitted the data when it the mobile terminal receives them the data, and to determine the pilot pattern used by the identified emitterbase station.